

I CLAIM:

1. A magnetically shielded fluorescent lamp ballast case for shielding humans from the harmful effects of magnetic fields emitted from a fluorescent lamp ballast, by reducing the magnetic component of the electromagnetic fields emitted from the electrical and electronic components within said fluorescent lamp ballast, particularly the magnetic component of said electromagnetic fields between 60 Hertz and 100 Kiloherz, comprising:

a generally rectangular fluorescent lamp ballast enclosing said electrical and electronic components, said fluorescent lamp ballast case having holes in said fluorescent lamp ballast case to insert external connecting wiring;

said fluorescent lamp ballast being made of a shielding material absorbing the magnetic component of the electromagnetic fields;

said magnetic shielding material being a metal alloy.

2. The fluorescent lamp ballast case as in Claim 1 wherein said metal alloy being a ferromagnetic alloy.

3. The fluorescent lamp ballast case as in Claim 2 wherein said ferromagnetic alloy being a soft ferromagnetic alloy.

4. The fluorescent lamp ballast case as in Claim 3 wherein said soft ferromagnetic alloy further comprising an alloy containing ~~one or~~ at least one element selected from the group consisting of iron, nickel, or cobalt.

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5. The fluorescent lamp ballast case as in Claim 3 wherein said soft ferromagnetic alloy being characterized by having an initial magnetic permeability of at least 200 gauss/oersted, preferably above 2,000 gauss/oersted.

6. The fluorescent lamp ballast as in Claim 1 wherein said fluorescent lamp ballast is a core-coil fluorescent lamp ballast.

7. The fluorescent lamp ballast as in Claim 1 wherein said fluorescent lamp ballast is a solid state electronic fluorescent lamp ballast.

8. A magnetically shielded fluorescent ballast case for shielding humans from the harmful effects of magnetic fields emitted from a fluorescent lamp ballast, by reducing the electromagnetic fields emitted from the electrical and electronic components within said fluorescent lamp ballast, particularly the magnetic component of said electromagnetic fields between 60 Hertz and 100 Kilohertz, comprising:

a generally rectangular fluorescent lamp ballast enclosing said electrical and electronic components, said fluorescent lamp ballast having holes in said fluorescent lamp ballast case to insert external connecting wiring;

said fluorescent lamp ballast case being made of steel or aluminum, and lined with a magnetic shielding material,

said magnetic shielding material being a metal foil alloy,

said metal foil alloy being attached with adhesive to said ballast case.

9. The fluorescent lamp ballast case as in Claim 8 wherein said fluorescent ballast case is lined on the inside with said metal foil alloy.

10. The fluorescent lamp ballast case as in Claim 8 wherein said fluorescent ballast case is lined on the outside with said metal foil alloy.

11. The fluorescent lamp ballast case as in Claim 8 wherein said metal foil alloy being a ferromagnetic alloy.

12. The fluorescent lamp ballast case as in Claim 11 wherein said ferromagnetic alloy being a soft ferromagnetic alloy.

13. The fluorescent lamp ballast case as in Claim 12 wherein said soft ferromagnetic alloy further comprising an alloy containing one or at least one element selected from the group consisting of iron, nickel, or cobalt.

14. The fluorescent lamp ballast case as in Claim 13 wherein said soft ferromagnetic alloy being characterized by having an initial magnetic permeability of at least 200 gauss/oersted, preferably above 2,000 gauss/oersted.

15. The fluorescent lamp ballast as in Claim 8 wherein said fluorescent lamp ballast is a core-coil fluorescent lamp ballast.

16. The fluorescent lamp ballast as in Claim 8 wherein said fluorescent lamp ballast is a solid state electronic fluorescent lamp ballast.